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Directorate Spatial Statistics
Regional Workshop on the compilation of the TSA
Manila, 19 June 2017
(9.15-10.00)

Purpose and role of TSA and Austrian experiences
Purpose and use of TSA
What is Satellite Accounting in general?

- **Extension** to the “System of National Accounts” (SNA) which enables a better understanding of the size and role of an activity which is usually “hidden” within such accounts.

- Satellite accounts **provide**
  
  - additional information on particular social concerns of a functional or cross-sector (multidisciplinary) nature (e.g. environment, agriculture, tourism);
  
  - the possibility of using of complementary or alternative concepts, including the use of classifications (when needed) and accounting frameworks (e.g. TSA);
  
  - further analysis of specific data by means of relevant indicators and aggregates;
  
  - linkage of physical data sources (e.g. flows, employment) and analysis to the monetary accounting system.
What is Tourism Satellite Accounting? (1)

- **SNA 2008** (besides environmental accounting and health satellite accounts (and unpaid household activity)) and **ESA 2010** (see Table 22.1, para 22.06) are proposing to draw up Tourism Satellite Accounts (SNA 2008, para 29.89-29.101; ESA 2010, para 22.123-22.129), for the analysis of the role of tourism in the national economy, since

  \[
  \text{SNA 2008 and ESA 2010 do not distinguish between a shoe purchased by a visitor or by a resident.}
  \]

- **THEREFORE:**
  - Tourism Satellite Account (TSA) integrates supply side and demand side information figuring out the share of tourism demand related to the total value added.
  - TSA links tourism statistics with macroeconomic analysis.
  - TSA highlights the link between domestic, inbound and outbound (domestic part) tourism and the balance of payments.
  - The respective commodities produced by tourism suppliers and purchased by visitors are included in the core accounts/tables of TSA.
The 10 TSA Tables

1-4  Tourism Consumption
5    Production
6    Demand meets Supply
7    Employment in Tourism industries
8    Tourism Gross Fixed Capital Formation
9    Tourism Collective Consumption
10   Physical Indicators
Classification of products (TSA-RMF 2008)

(1) Tourism characteristic products:

Internationally comparable tourism characteristic products
- Accommodation services for visitors
  - Accommodation services other than vacation homes
  - Vacation homes
- Food and beverage serving services
- Railway passenger transport services
- Road passenger transport services
- Water passenger transport services (coastal and inland)
- Air passenger transport services
- Transport equipment rental services
- Travel agencies and other services (margin only)
- Cultural services (theater, museums, etc.)
- Sports and recreational services (entry fees to sport events, casino, etc.)

Country-specific tourism characteristic products
- Country-specific tourism characteristic goods
- Country-specific tourism characteristic services

(2) Other consumption products (tourism connected and non-tourism related)

(3) Valuables (purchases exceeding the custom’s threshold within merchandise trade)
Monetary flows in the tourism (and leisure market)

Non-residents

Within the reference country

Tourism

“non-usual environment”

Residents

Within the reference country

Tourism

Leisure

Tourism

“non-usual environment” “usual environment” “non-usual environment”

1) Leisure activities of residents within their usual environment/place of living (i.e. visiting a restaurant, cinema).
Use of TSA

- Describing the size and the **economic importance** of tourism
- Providing detailed information on **visitor consumption, including all forms of tourism**
- **Linking** economic data and other non-monetary information on tourism
- Providing a reliable and credible **tool** necessary for both effective **public policies** and efficient **business operations**
- **Enhance robust information** and indicators on the role tourism is playing and can play in the economy
- Bring **new recognition and confidence in tourism** as one of the most important sectors of the economy
Use of TSA (cont.)

- Including all kind of tourism activities, same-day visits, overnight visits, visits in rented and non-rented accommodation

- Give greater credibility to tourism statistics and to the indicators analyzing the scale and the significance of tourism as an economic activity

- Provide a rich and informed vision of the “tourism industry” and of its component activities

- Generate usable, practical information for companies and in particular for SMEs

- Development of research and innovative methodological approaches

- Allow international comparison of results by considering all kind of tourism activities
What else?

- **Reconciliation/benchmarking** tool regarding demand and supply related data, considering the quality of the data used
- **Using/combining different data sources** as a prerequisite for receiving a consistent TSA
- Starting point of the documentation of the **meta data** related the data used compiling TSA
- Starting point of **cooperation** between NSI and NTA, Central Bank, research institutes, and exchange of views with the tourism industry
- Starting point of general considerations related the tourism statistical system, including the introduction of **best estimates**, **modeling** and **extrapolation methods**
- Starting of discussion related the **quality of the used statistics** and rethinking of the used concepts
- Increasing the **public acceptance** of tourism statistical data and justifying new/additional research in this field
The compilation of TSA might be a starting point for cooperation between the NSIs and the “National Tourism Administrations” (NTAs), the central bank and research institutes.

The involvement of developing TSA is one of the main reasons for general considerations related to the tourism statistical system - including the introduction of best estimates, modelling and extrapolation methods.

TSA provides an important basis for reconciliation and benchmarking regarding demand and supply related data (i.e. domestic supply versus internal tourism consumption by products in TSA-Table 6).

TSA brings new recognition and confidence related to tourism statistics and its importance for measuring the importance of tourism in a country, justifying additional financial support for the improvement of tourism statistics.

The effort to create national TSAs in a worldwide harmonised manner have furthered the cross-border networking between researchers and the diffusion of methodological innovation and thus have helped attain the goals of various tourism strategies.
TSA provides a framework for policy analysis of issues related to tourism economics as well as for model building, tourism growth analysis and productivity measurement; that way it can be used by the tourism policy in order to

- analyze tourism from an economic point of view;
- offer policy makers insights into tourism and its socio-economic functions and impacts;
- indicate the production function of tourism industries and to illustrate the interlinks between the tourism industries and the rest of the economy;
- calculate tourism direct value added for a given list of industries in a coherent system;
- provide information on the employment profiles of the tourism industries;
- find out what visitors buy and which industries benefit most from these purchases;
- provide information about the structure of the main visitors (e.g. households, business, government employees or non-residents).
TSA - the restrictions

Aside from the above mentioned areas the usage of the TSA is limited or the results are limited used:

- The increased **analytical and research capacity** of the TSA is not often taken advantage of.
- Also it is known that the research institutes consider the data, using it for **continuative economic and tourism policy analyses**. Other than that analyses are rarely made based on TSA results.
- **Fast available and short-term data**, in order to identify monthly and seasonal changes, are not available so far.
- **Detailed results are not available**; therefore, conclusions at the micro level are not possible.
- The **impact of special events** and shocks (e.g. terror attacks, environmental disasters) cannot be currently analysed and forecasted.
- Based on TSA data on **market level are not available**.
- Approaches are sometimes made **from various organizations** to quantify the impact on a more detailed level. These calculations are unfortunately sometimes misleading.
TSA - Austrian experiences
Tourism Statistics at Statistics Austria

Primary Statistics

- Accommodation capacity
- Arrivals & overnight stays
- Trips with overnight stay
- Same-day trips

Accommodation in Austria

Travel Behavior of Austrians

Accounts

- Travel Balance of Payments
  - Income from incoming travel
  - Spending on outgoing travel
- (Regional) Tourism Satellite Accounts*
  - Value added (direct/indirect)
  - Labor force (TSA for Austria, only)

*) Austria (since reference year 2000), Vienna (since reference year 2002), Upper Austria (2003) and Lower Austria (since 2005; irregular).
## TSA for Austria - Factsheet

<table>
<thead>
<tr>
<th><strong>What is calculated</strong></th>
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<tbody>
<tr>
<td><strong>Aim</strong></td>
<td>Information about tourism as an economic phenomenon; by integrating the supply and demand side</td>
</tr>
<tr>
<td><strong>Subject</strong></td>
<td>Tourism’s contribution to value added and employment (on national level, only)</td>
</tr>
<tr>
<td><strong>Coverage</strong></td>
<td>Direct effects (TSA available from 1999), regional TSAs; estimates related to the indirect effects by the “Austrian Institute for Economic Research” (WIFO)</td>
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<table>
<thead>
<tr>
<th><strong>Why is it calculated</strong></th>
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<tbody>
<tr>
<td><strong>Legal basis</strong></td>
<td>x</td>
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<tr>
<td><strong>Contract</strong></td>
<td>Federal Ministry of Science, Research and Economy (BMWFW) Regional Tourism Organisations for Lower Austria, Upper Austria and Vienna</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>How is it calculated</strong></th>
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<tbody>
<tr>
<td><strong>Type of statistics</strong></td>
<td>Accounts (synthetic product: model estimation based on existing data)</td>
</tr>
<tr>
<td><strong>Method</strong></td>
<td>TSA: Recommended Methodological Framework (UNWTO, OECD, EUROSTAT, 2008)</td>
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</tbody>
</table>
TSA – part of the tourism statistical system

TSA

Input ...

SNA/ BoP

Bridge tables

Aggregates

TBoP

Aggregates

T-MONA
(Austrian National Tourist Office)

Nights

Accommodation in Austria

TSA

Travel Behavior of Austrians

Nights

Domestic trips, expenditures, nights in unpaid accommodations

Expenditure structure

Harmonization questionnaire, nights in unpaid accommodations

Expenditure structure

Nights, country breakdown

Expenditure, country breakdown

www.statistik.at
Tourism Satellite Accounting in Austria is

- **commissioned** by the “Federal Ministry of Science, Research and Economy”,
- done in **cooperation** with the Austrian Institute of Economic Research (WIFO),
- done by the **Tourism Statistics’ section** of Statistics Austria,
- done **every** year,
- not a perfect system, but **being yearly improved**,
- a **living system**, taking into account any relevant data source,
- **methodologically** based on the UNWTO/EUROSTAT/OECD TSA requirements,
- **not as detailed** as required according to the UN-Manual,
- the **basis** for Regional TSA and the Employment Item.
Development of TSA in Austria since 2001

On behalf of BMWFW\(^1\) Statistics Austria and Wifo\(^2\) have developed a TSA for Austria based on TSA-RMF 2001 (direct & indirect effects)

Since the reference year 2003 estimates related the tourism labour were introduced (direct & indirect effects)

Since the reference year 2002 Regional TSAs are done for Vienna, followed by Upper Austria and Lower Austria on behalf of the respective Tourism Boards (excl. employment effects)

Starting with reference year 2013/2014: Applying the requirements of TSA-RMF 2008

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1) The “Federal Ministry of Science, Research and Economy” (BMWFW) creates the best possible framework for enterprises and represents at international levels the interests of Austria as a business location. Besides science, research, external trade, enterprise and energy the BMWFW strives to create a first-class framework for the Austrian tourism industry, since Austria's tourist industry is a major economic factor. [http://www.en.bmwfw.gv.at/Seiten/default.aspx](http://www.en.bmwfw.gv.at/Seiten/default.aspx)

2) The “Austrian Institute of Economic Research” (WIFO) is Austria's leading institute for application-focused empirical economic research. Founded in 1927 by Friedrich August Hayek and Ludwig Mises, WIFO analyses and forecasts economic developments in Austria and abroad. WIFO is a non-profit organisation that carries on its scientific work independently of politics and business. [http://www.wifo.ac.at/en](http://www.wifo.ac.at/en)
Compiling TSA – internal partners/data

- National Accounts
- Supply Use Tables
- Private consumption

- Structural Business Statistics (SBS)
- Short Term Statistics (STS)

Tourism Satellite Accounts

- Travel habits
- Tourism Statistics
- National Account
- Business Statistics
- Population Statistics
- Other internal data
Compiling TSA – external partners/institutions

- **Contract partner**: WIFO – Österreichisches Institut für Wirtschaftsforschung
- **Client by contract**: bmwf.w – Federal Ministry of Science, Research and Economy
- **Other institutions**
- **Austrian Central Bank**
- **Austrian Tourism Board**
- **TBoP**
- **T-Mona**

Data flows from the contract partner to TSA, and from TSA to other institutions, the Austrian Central Bank, the Austrian Tourism Board, TBoP, and T-Mona.
A TSA for Austria - simplified but not simple

Tourism Satellite Accounting in Austria is

- **available** for TSA-Standard-Tables 1, 2, 4, 5, 6, and 7;
- not based on primary data sources, but mainly on *secondary data sources*;
- partly and where necessary or feasible based on *estimates* and *assumptions*;
- only published for *current prices*, not constant prices;
- published taking into account *key results*, only;
- extended by considering *indirect* effects;
- extended by taking into account *leisure* effects.
A TSA for Austria - remaining challenges

Analysis on a deeper disaggregated level has to be done with certain caution, since

- **extrapolation indicators** based on activities were applied proportionately to commodities, which assumes a parallel development of activities and commodities;
- the **Input-Output data** and SUT are available on a less detailed level (mainly on a 2-digit level) as required by TSA methodology;
- classification **compatibility** problems concerning industry/commodity;
- the activities/services of “Hotel and Restaurant” cannot be distinguished clearly;
- information on the **composition of package tours** is based on estimates (improved through TBoP);
- more recent and more detailed data on **same-day visitors** is hardly available;
- more detailed output data (sales) on **passenger transport** would be needed.
## A TSA for Austria - the main data sources

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<td>Mirror Data</td>
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<td>Labor Force Survey</td>
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<td>Household Budget Survey</td>
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Purpose and role of TSA and Austrian experiences